

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE PAPER
IN AMERICA

GEORGE W. YORK, Editor. DEVOTED EXCLUSIVELY TO BEE-CULTURE. Weekly, \$1.00 a Year. Sample Free.

VOL. XXXII. CHICAGO, ILL., AUG. 10, 1893.

NO. 6.



Our Chinese Contributor. Mr. Wung Lung, of California, favors us with another article on page 180, which gives more details of his interesting experience with the "honey-flies." His characteristic descriptions are certainly amusing, if not altogether instructive. It does us all good to have a hearty laugh, and the oftener the better for our health and happiness. We commend Wung Lung's writings to all who are inclined to gloominess, or are easily discouraged. Others like Dr. Mason and Dr. Miller, who are never troubled with "long faces," can skip Wung Lung's "face-broadening" contributions.

Bro. Hutchinson visited the Michigan experiment apiary a short time ago, and found Mr. Taylor, the State apiarist, hard at work. Besides a picture of the State apiary, the July *Review* contained Mr. Taylor's first article on "Work at Michigan's Experimental Apiary," which describes some of the experiments now being conducted. Mr. Taylor certainly is "the right man in the right place," and his work will prove of great value to bee-culture all over the world. Next week we will give to our readers Mr. Taylor's first report.

Have You Read page 189 yet?

Apicultural Experiments is a topic that has been up for discussion, more or less, for several years, but during the past few months, or perhaps a year, it has received more careful attention than ever before.

On page 178 of this issue of the *BEE JOURNAL*, the editor of the *Bee-Keepers' Review* gives, in a clear, concise, and comprehensive manner, the various reasons why bee-keepers should have experiments conducted, and also how to go about securing the establishment of State apiaries in which may be carried forward such experiments as shall most aid the progressive bee-culture of to-day.

As Bro. Hutchinson so thoroughly covered this subject in his introductory editorial in the July *Review*, we decided, after several careful readings, that we could not do better than to copy it for the benefit of our readers, and we trust that all will give the matter the attention it deserves, so that they may be able to help in obtaining what must prove of inestimable value to bee-keeping everywhere, if once secured and properly carried on.

While we agree with Bro. H.'s ideas upon this matter in almost every particular, we can see no need for *every* State spending its money for conducting the same experiments. For instance, why should Illinois and Iowa employ two sets of men and apiaries to experiment upon a question that can just as well be settled by either State alone?

Why would it not be as satisfactory to have say four experiment stations to take up the work—located in the North, South, East and West? As Michigan already has one, let that suffice for the North. For the South, have one in Texas; for the East, in

New York or Vermont; and the West, in California. If a central one is needed, have it in Kentucky or Missouri.

If the experiment apiaries can be manned and the work carried on at a minimum expense of \$500 each, why spend something over \$20,000 when about \$2,000 will do the same work? If the right persons can be secured in four or five first-class experiment stations, to take charge of such experiments as shall be thought to be of the most value to bee-culture, we feel certain that the results obtained will be as satisfactory and final, if not more so, than if the same work was spread out among 40 different apiaries and experimenters.

Again, the reports from four or five intelligent and painstaking experimenters will be more likely to be given in full in the various bee-papers, and also will receive a much better hearing and consideration by reading bee-keepers than would 40 or more such reports. We believe in concentration rather than "scattering" in so important a work as this.

In regard to the Bee-Keepers' Union helping to bear the expenses of committees whose duties shall be to endeavor to secure the establishment of bee-experiment apiaries, we would say that we also "believe it would be money well spent," if used in securing a limited number of such apiaries, but not in all the States and Territories of the Union. If the latter were attempted, there likely would be scarcely sufficient funds to more than pay for the necessary postage and stationery, saying nothing of time and carfare required by the numerous committees in meeting the Boards of Agriculture, etc. Now that the resources of the Union may be used in whatever direction a majority of its members decide, we, as a member of the Union, most assuredly would favor the use of a portion of its funds in this work, as we believe it will ultimately prove to be of almost as much benefit as if spent in defending the rights of bee-keepers. In fact, it would be exactly in the line of aiding them in getting their rights, when attempting to secure experiment apiaries, for surely a portion of the \$15,000 which each State and Territory receives annually belongs to apiculture, and should be devoted to its interests.

In those States where no experiment apiaries are established, the bee-keepers' share of the \$15,000 could be used by the State

bee-keepers' association, for the publishing of its reports, and in otherwise building it up and educating the people in the uses and value of honey as a food and as a medicine, thus creating a greater demand, and also in showing the great help that bees are to horticultural and agricultural crops.

O, this is a large subject, and we have said enough for this time. We would now like to learn how our readers view this matter of experiments in apiculture.

Hinting at the Blarney Stone.—A few days ago we received the following letter from our Bro. Stone, whose picture and biographical sketch we gave on page 107:

WORLD'S FAIR GROUNDS, July 28, 1893.

FRIEND YORK:—When our President Hambrough came to the Fair Grounds yesterday, from a visit to your office, and held before me the BEE JOURNAL of July 27th, asking me, "Do you know that gentleman?" I was much surprised in more respects than one. First, I thought the picture reflected great credit on the artist, and is a flattery on his part; but when I read the article connected therewith, I was reminded of the language I heard the other day in the neighborhood of Blarney Castle, and think my friends must have taken a journey to that place in company with yourself.

Yours truly,

JAS. A. STONE.

For the information of those of our readers who may not have before heard of Blarney Castle, we would say that at the World's Fair is a reproduction of the famous Castle in "Ould Ireland," and also within it, so they say, a portion of the noted "Blarney Stone," which every good Irishman, we believe, is supposed to have kissed. Now to suggest that this editor and Miss "One of Them," who wrote the sketch of Bro. Stone, had "taken a journey" to the new Blarney Castle and kissed the Blarney Stone—why, it's terrible insinuation! In fact, it's the "Blarneyest" kind of blarney for Stone to "get off;" and we shall think Bro. Stone is a kind of "Blarney Stone" himself, if he makes any more such hints. But we'll be easy on him this time, and hope he'll—well, *forgive us* for surprising him with that biographical sketch.

Honey was once considered a luxury, but now it is within the reach of the common people. Every bee-keeper should see to it that they get it.

GENERAL QUESTIONS.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 25 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Leaving on Supers When Not Storing.

Is it best to leave on the upper half or super part of the hive empty of everything when the bees are not storing any surplus honey? F. N. GARDINER.

Guthrie, O. T.

ANSWER.—It is certainly not good to have sections on a hive when the bees are not storing, on account of the injury done to the sections, but as you put the question there are no sections, and the question is whether it is a good thing for the bees. Perhaps not many leave supers on when not in use, but some report favorable results from wintering with supers left on. We do not remember to have seen any adverse reports, yet adverse reports are not generally so freely given as favorable ones. Perhaps you can decide the matter most satisfactorily for yourself by trying part in that way.

The All-Wood Queen-Excluders.

Last spring, or winter, when I ordered my supplies, I ordered an all-wood queen-excluder for each hive, and as soon as the bees had got nicely started in the first super, I put on a second and one of the all-wood queen-excluders under super No. 1. I found that they quit working above, and went to building on the excluder. Not liking that, I removed the excluder, and they went to work again in good earnest, and I thought no more about it until a few days ago I took off my first honey. Out of three supers that I took off, two were easily cleaned of bees, but the third I found after a day or two had brood in, and the young bees were hatching out. Now for my questions: 1. Have bee-keepers in general, who have tried all-wood separators, found them a success? or are they a failure?

I had used them in the early spring to transfer with, and the queen got back somehow in all but one instance, and they warped and curled fearfully. Question No. 2. If I now cut out the

comb in the sections where brood has been, and return them to the bees, will they fill the sections full of honey so that I can put the honey on the market? Of course it will be dark honey, as the only thing they have to work on now is buckwheat—it is just beginning to bloom.

We had a fine honey-flow for a little while, but the dry weather cut it off short, and now the bees are loafing.

E. B. ELLIS.

Cooksville, Ills., July 14, 1893.

ANSWERS.—1. We do not remember to have seen any reports from those who have used excluders made entirely of wood, except such as were formerly made of slats, and they were entirely unreliable. We should be glad to get reports from any who have used all-wood excluders, made with perforations after the manner of zinc excluders.

2. Yes, if you cut the brood out of the section, and return the section to the bees, there is no reason why they should not fill it in good shape, provided there is enough of the comb without brood left at the upper part to serve as a starter; or you can put in a fresh starter of foundation.

Getting Bees to Work in Supers, Etc.

1. How can I get my bees to work in the supers? I have tried putting up combs full of honey from below, but they insist on building straight up from the lower frames through and into the upper frames.

2. Should comb honey be taken during the honey-flow where frames are used in the super? EARNEST NOVICE.

Grand Prairie, Tex.

ANSWERS.—1. If your question is not misunderstood, your trouble is not to get bees to work in the upper story but to keep them from working between the two stories. It is simply a matter of room. If there is room enough between the upper and lower stories, you may be sure the bees will fill it if they work in both stories. If there is a queen-excluding honey-board between the two stories, see to it that there is no greater space than a quarter of an inch between the top-bars in the lower story and the honey-board, and between the honey-board and the bottom-bars of the upper story. If there is no honey-board, but the queen is allowed to roam at her own sweet will in either story, then have only a quarter of an inch between the top-bars of the lower story and the bot-

tom-bars of the upper story. If your question is not correctly understood, please ask again.

2. Perhaps most honey-producers extract from time to time during the honey-flow. Others, and among them those noted producers, the Dadants, leave all the honey on the hives, adding as many stories as necessary until the close of the season, then taking off all, and extracting, if desired.

Moving Bees About 200 Yards.

I have about 70 colonies of bees to move 200 yards, between Aug. 1st and 15th. What is the proper time of the day to move them? What length of time must they be kept closed after being moved? Is it policy to take off the supers?

P. LATTNER.
Worthington, Iowa.

ANSWER.—Probably it makes no difference at what time of day they are moved, providing all the bees are in the hive. You might commence moving as soon as they stop flying in the evening, and stop up any that are left to be moved in the morning, although it would be better to finish the job in the evening. The longer they are kept shut up the more likely they are to mark their new location when they come out; but then you must remember that it is no great benefit to bees to be shut up very long in the month of August, nor indeed at any time. Be sure that they have plenty of fresh air, then if they are moved in the evening no great harm will come from leaving the hives closed till the middle of the next day. Have boards in front of the hives so as to impede as much as possible their free exit, and make everything on their old location look as different as possible.

Colonies Killing their Drones, Etc.

I have a colony of bees that I hived June 12th. I put them into a 10-frame hive on comb foundation; they filled the lower frames, and I put on two 32 one-pound surplus section supers, one super at a time, and when that was full I placed the second one under it, which will be filled in about three more days. For the last three days they have been killing and carrying out dead drones and young worker bees. Some of the young bees have their insides all taken out, leaving nothing but the shell. They are also killing the full-grown drone-bees.

What is the trouble? They are working very hard.

I have 7 colonies, and they are all doing well; three of them have their second set of 32 one-pound sections, and the other four have their first set almost filled.

There are acres of clover here, but the bees don't seem to be working on the white clover much. My bees are gathering honey very fast from sweet clover.

I am a beginner, but with the assistance of the AMERICAN BEE JOURNAL I will soon catch up. I receive it every week, and am very much pleased with it.

Wm. H. DURHAM.

Rockford, Ills., July 20, 1893.

ANSWER.—Your bees are all right. The white clover harvest is over, and they are looking out for your interests too closely to have you support a lot of useless drones. Or, perhaps it is better to say that linden and white clover both stopped with you about July 20th. Even if you see bees working very busily on sweet clover, there is not enough of it for the bees to store much surplus, in all probability.

You say your bees don't seem to be working on white clover, but you must remember that there are a great many blossoms for each bee, and your bees are spread over a great many acres. You will see plenty of clover bloom yet, but somehow the bees don't seem to get any good from the last of it.

Convention Notices.

ILLINOIS.—The summer meeting of the Northern Illinois Bee-Keepers' Association will be held at the residence of O. J. Cummings, 2 miles northeast of Rockford, Ills., on Aug. 15th, 1893. A good meeting is anticipated. Everybody is invited. Come and see Mr. Cummings' methods of handling bees.

New Milford, Ills. B. KENNEDY, Sec.

INTERNATIONAL.—The North American Bee-Keepers' Association will hold its 24th annual convention on Oct. 11, 12 and 13, 1893, in Chicago, Ills. Not only is every bee-keeper in America, whether a member of the society or not, invited to be present, but a special invitation is extended to friends of apiculture in every foreign land. FRANK BENTON, Sec.

Washington, D. C.

Capon and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year, for \$1.10.

**DR. ELISHA GALLUP.**

A quarter of a century ago the name of E. Gallup was well and favorably known to bee-keeping in two hemispheres. Learning that he is now residing in Santa Ana, Calif., we wrote him in regard to publishing his biography

**DR. E. GALLUP.**

and picture, and as a result of that correspondence we have the great pleasure to present to our readers this week one of the once "old wheel-horses" of bee-culture, but just as he looks now.

It will be remembered that Bro. G. M. Doolittle dedicated his book on "Scientific Queen-Rearing" to Dr. Gallup, who was Bro. D.'s friend and teacher in bee-keeping 25 years ago. He also uses what is known as the "Gallup frame," as Dr. Gallup was the inventor of a hive and frame which bore his name.

In the July number of the *Illustrated Bee Journal*, published by Mr. N. C. Mitchell, in 1870, at Indianapolis, Ind., we find the following in connection with a picture of Dr. Gallup, showing him as he looked 28 years ago:

Elisha Gallup was born on Aug. 22, 1820, in the town of Melbourne, county of Sherbrook, Canada East. His parents were born in Connecticut, on Long Island Sound. By occupation he is a farmer, with the exception of eleven years a miller. He removed to Wisconsin in 1859, and settled in the town of Metomen, Fond du Lac county. In June, 1865, he removed to Mitchell county, Iowa. And now, in the fear that we may not do justice, we will here introduce friend Gallup, and let him speak for himself:

"From my earliest youth I have been an enthusiastic admirer of the busy bee; in fact, my earliest recollections are of the bees and bee-hives. Often have I heard my mother say, if she lost me when a little fellow, she was sure to find me by the bee-hives. My intense desire to learn and investigate the bees in every particular has been such that I have dreamed of them at night, and thought of them in my waking hours to an almost absorbing extent, and to-day I am still a student; and I find those persons who proclaim themselves *finished*, in every branch, are the ones who in reality *know the least*.

"My early advantages were of a limited nature in the way of education—scarcely common-school advantages did I have. My first reading upon the subject of bees, was a small pamphlet written by a Mr. Weeks, of Vermont, which abounded in errors. My next was a work by Mr. T. B. Miner. I picked up my first real insight into the true system of bee-keeping from an old German, by the name of Wellhuyzen. He made 125 colonies from one, in two seasons. And here I will remark, that I have been suspected of getting my knowledge upon the subject of bee-culture from Mr. Langstroth's work; but to settle that matter quickly and satisfactorily, I have never been known to quote from Mr. L.; neither could I have done so, from the fact I had it not to quote from. Once I remember to have had the privilege of skimming through it one evening, at the house of a friend, and that was merely to see if there were any new ideas put forth.

"Eight years ago last season (in 1861) I obtained my first movable-comb

hive. My progress from that time I felt was rapid, from using a glass observatory hive of one single comb, for several seasons in Canada, of my own getting up. In my opinion, the movable-comb hive is very far superior.

"Mr. Quinby's first edition of his book struck me as being excellent; and when I saw an advertisement of his second edition, knowing that he had the advantage of the movable combs, I looked forward with confidence, and expected to see some questions fully discussed by him, which I considered of vital importance; and when I obtained the book, and found that he had almost stood still, and those questions not even mentioned, I was disappointed in the work, and this determined my course to some extent.

"For the purpose of fitting myself to appear before the reading world, I attended writing school, so as to accomplish myself in at least writing a legible hand. This was in the winter of 1865-66. As you say you are somewhat familiar with my writings, I leave you to judge of my success. My disadvantages at my time of life I fully appreciated; but being a man who has the fortitude to not look back when the hill has once begun to be climbed, my ambition and energy kept me ever on the onward path. I commenced first to write for the AMERICAN BEE JOURNAL, and to-day my private correspondence would fill a goodly-sized volume, of which I am proud—with innumerable testimonials from different parts of the United States and Canada, and from those who were entire strangers, which enhances their value, being assured it is not flattery."

Orchard, Iowa.

E. GALLUP.

Having read something of the early days of the Doctor, we now turn to a letter we received from him a short time ago, and which tells something of his life at the present time:

SANTA ANA, Calif., July 20, 1893.
GEORGE W. YORK & Co.—

Dear Sirs:—I have but very little time at command now to reply to your request, but I send you a photo which I had taken about three months ago. All my friends say it looks older than I really do. Every one says that I hold my age *remarkably*. I know that many a young man does not show the activity that I do.

Of course I am not in the bee-business now, but I still take a great interest in the business, and when I see a couple of

boys managing an apiary and taking out 20 tons of honey this season, and others in proportion, it makes me sort of hanker after the bees as of old.

My second wife died last March, and left me with three little ones—the oldest six years, and the youngest two years—and I am caring for them without the assistance of a woman. I will be 78 years old the 22nd of next month, and I am still strong and hearty, and, to all appearance, good for some time yet.

I left Iowa completely broken down, both mentally and physically, and I have regained both in this grand and glorious climate. I was fully determined to go into the bee-business here, and did make a start, but the demand for my services as a hygienic and common-sense Doctor has been such that I could not get out of the business, and to carry on the two was impossible.

I feel now that I must live to care for my little boys and girl. They are the comfort of my old age.

DR. E. GALLUP.

While we have not the pleasure of a personal acquaintance with Dr. Gallup, nor have many of the present readers of the BEE JOURNAL, yet there are those who will remember him and his interesting contributions to the bee-literature of 25 years ago, and they will now be led to recall the memories of other years when progressive bee-culture was just beginning to take form. Our younger readers, with ourselves, are glad to learn more of those who helped the cause of bee-culture in its early and struggling days, and thus all will be profited and entertained by reading our department biographical in this number of the BEE JOURNAL.

"A Modern Bee-Farm and Its Economic Management," is the title of a splendid book on practical bee-culture, by Mr. S. Simmins, of England. It is 5 $\frac{1}{2}$ x 8 $\frac{1}{2}$ inches in size, and contains 270 pages, nicely illustrated, and bound in cloth. It shows "how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man." It also illustrates how profits may be "made certain by growing crops yielding the most honey, having also other uses; and by judgment in breeding a good working strain of bees." Price, post-paid, from this office, \$1.00; or clubbed with the BEE JOURNAL for one year, for \$1.70.



CONDUCTED BY
Mrs. Jennie Atchley,
GREENVILLE, TEXAS.

Things We Ought to Know.

We ought to know that queenless bees nearly always build drone-comb.

We ought to know that it stimulates a colony to get to build some comb.

We ought to know who it is that can get the drones all out of a strong colony the first round.

We ought to know the color of that person's hair that can always find all the queen-cells in a strong colony the first round.

We ought to know that colonies with young queens are less inclined to build drone-comb than those with old queens.

We ought to know that broken pieces of sections are the best things out to keep records on the nuclei.

We ought to know that bees, in one sense, consider themselves queenless when they build cells, and in natural swarming they seem to know that the colony will be left queenless, and they build cells to that end.

We ought to know that rearing queens at any season is only forcing nature, and that all the cells are built naturally.

We ought to know that nature has taught the bees that the best thing to do is to rear a queen as soon as possible after they find they are queenless.

We ought to know that bees in their great hurry to get a queen often make a mistake and start to rear a queen from a larva too old, and, if allowed to hatch, will make a faulty queen.

Queen-breeders ought to know that they should "proof-read" their queen-cells before they are sealed, and not allow a cell to be used that is started from such a larva.

We ought to know that queens reared in good, strong queenless colonies are just as good as any as that are reared naturally.

We ought to know that there is a

great difference in bee-keeping in the North and in the South. For instance, dead brood will cause *foul brood* in Canada, when it will not, nor cannot, in Texas.

We ought to know that the only way to keep drones successfully for any length of time we must keep them in queenless colonies.

We ought to know that when the bees begin to lead the drones out, or pen them off to starve, they are of no more good.

JENNIE ATCHLEY.

Scarcely Any Rain Since May.

MRS. ATCHLEY:—We have had scarcely any rain since May, and bees are getting no honey, of any account, and I shall be glad if mine get stores for winter.

F. O. BLAIR.

Trinidad, Colo., July 24, 1893.

When to Transfer Bees.

MRS. ATCHLEY:—How late can bees be transferred? I have some bees in rotten box-hives, that I wish to get out. How late can bees be transferred profitably?

H. L. HARGRAVE.

Netta, Tex., July 18, 1893.

Friend H., my best time to transfer bees from box-hives is whenever I find them in such. I fear that you have in mind the old way, called "driving bees," that is, run them out into a clean, empty hive without combs or honey, which is not a good way all seasons of the year. You may transfer at any time when warm enough for bees to fly; but if bees are not gathering honey, you would better work in a tight room, and carefully secure all their nice straight combs into your frames, and if they have enough where they are, put it with them.

"It Takes a Lazy Man to Keep Bees."

MRS. ATCHLEY:—I suppose the majority of the readers of the BEE JOURNAL, who are practical bee-keepers, on seeing the above heading, will think, "That fellow doesn't know anything about bee-keeping." And so did I think the same way, when I received the compliment. Some four or five years ago I went to see a friend who is a very enthusiastic and industrious fruit-grower. When he showed me the different varieties of fruit and his methods of cultiva-

tion, I noticed that he also had a good locality for bee-keeping, and therefore asked him, "Don't you keep bees?" He replied very quickly, "No, sir! It takes a lazy man to keep bees!"

Now I wish to say that there are many persons that think as my friend did, even such as use honey on their table, and can see thereby that there is a much finer article produced, and in a more marketable shape now than it was years ago when the brimstone pit was yet reigning.

Yes, there are yet many persons who don't know, up to this date, that bee-keeping has become an important branch of industry. They think that all one has to do, is to lie down somewhere in the shade at swarming-time, and watch the swarming of the bees, and to hive them if a swarm should happen to issue; then in the fall, to attend to robbing or brimstoning some of the bees in order to get some honey. They don't consider how we obtain honey in such a nice shape. They don't know that in order to produce a good crop of honey the bee-keeper must be on his guard almost the whole year around for that purpose. They think that honey should be still much cheaper than it already is.

When I sold some honey in the market at New Albany, Ind., some years ago, at a price it was bringing then, a woman asked me, "Why is it that you always sell honey at such a high price? You bee-men have no work with your bees, all you do is to rob the honey from them in the fall!" Such a class don't take into consideration that our practical, movable-comb hives, which are generally used at present by all progressive bee-men, will necessitate more outlay than an old soap-box, nail-keg, or some hollow log. Then, after we have our bees in good, movable-comb hives, there are numerous other articles and supplies needed to successfully run the business; besides, as I said before, one has to be on guard, and devote much of his time to the business, if he intends to have his efforts crowned with success.

If one has in charge only 50 colonies of bees during a good honey season and swarming time, he will soon find out whether his bees will give him much of a chance to be *lazy*. Such ideas, and the belief that most of the honey in the market is adulterated, are great stumbling-blocks to our business, and as most people outside of the bee-keeping fraternity do not read bee-papers, it is difficult to educate them.

MAXIMILIAN.

Shawnee, Kans.

Bee-Keeping in Louisiana.

We have had a good many reports of late from our many customers, and they say since June 25th the bees have been rolling in the honey. We, ourselves, cannot complain, as we extracted from a few colonies to see what the yield would be, and from eight we got, on an average, 65 pounds per colony. We will get from those same colonies at least 50 pounds yet, making 115 pounds each—not bad for this season. As the spring was wet and cold, bees gathered but little honey, only sufficient to build up—no surplus.

We handle nothing but the Italian bees, and have had none other since their introduction in 1872. We consider them the best honey-gatherers, and as to docility, etc., we never use a bee-veil in the apiary. In going over our apiary the other day we noticed two queens quietly laying side by side—mother and daughter. Of course, to our old, experienced apiarists, this is nothing new, but it only goes to show that bees know when a queen is no longer fit for service, by superseding her with a young queen.

THE P. L. VIALLON MFG. CO.
Bayou Goula, La., July 12, 1893.

LANGSTROTH FUND.

[For years, bee-keepers have felt that they owed the Rev. L. L. Langstroth—the Father of American bee-culture—a debt that they can never very well pay, for his invention of the Movable-Frame Hive which so completely revolutionized bee-keeping throughout all the world. In order that his few remaining years may be made as happy and as comfortable as possible, we feel that we should undertake a plan by which those bee-keepers who consider it a privilege as well as a duty, might have an opportunity to contribute something toward a fund that should be gathered and forwarded to Father Langstroth as a slight token of their appreciation, and regard felt for him by bee-keepers everywhere. No amount above \$1.00 is expected from any person at one time—but any sum, however large or small, we will of course receive and turn over to Father L. All receipts will be acknowledged here.—ED.]

List of Contributors.

Previously Reported	\$8 75
W. A. Fee, Rockport, Ind.....	25
Wm. Essieman, Garrett, N. Y	25
Bee-Keeper, Johnstown, Pa.....	25
Total.....	\$9 50

Great Premium on page 189!



Using Foundation Starters with Separators.

Query 883.—1. Is it necessary to place foundation starters in one-pound sections with separators? 2. If so, why?—L. W.

1. To be sure.—J. M. HAMBAUGH.

1. It is desirable. 2. It secures nicer combs.—A. J. COOK.

1. Yes. 2. So the bees won't build crosswise.—C. C. MILLER.

1. I think so. 2. To insure fine, straight combs.—R. L. TAYLOR.

1. I should think so, but I have never used separators.—MRS. L. HARRISON.

1. Yes. 2. The bees will begin sooner, and make a better job.—E. FRANCE.

1. Yes. 2. Bees will work sooner, and have more perfect combs, etc.—P. H. ELWOOD.

1. Yes, sir; I would use the foundation starters when separators are used.—J. P. H. BROWN.

1. It is not absolutely necessary, yet I would not think of doing without them.—H. D. CUTTING.

1. Yes. 2. So the bees may build combs exactly in the center of the sections.—DADANT & SON.

1. Yes, in my apiary. 2. Because it is the only way I can produce first-class honey.—EUGENE SECOR.

1. Certainly. I use full sheets of foundation. 2. To secure straight combs.—J. H. LARRABEE.

1. It is not necessary, but insures starting more promptly at the commencement of the season.—S. I. FREEBORN.

1. Yes. 2. Otherwise the combs might be built across the sections, and fastened to the separators.—G. M. DOOLITTLE.

1. Yes. 2. So that the bees will start the combs straight. Also, because they will begin more readily to build comb.—M. MAHIN.

1. Yes. 2. Without the starters the separators are of little value. If I were

to part with either, it would be with the separators, as I have found that they build just as straight without as with them; but without, they build more unevenly.—JAS. A. STONE.

1. Yes, sir; and full sheets are better yet. 2. If nothing of the kind is used, most of the comb will be attached to the separators, whether of wood or tin.—C. H. DIBERN.

1. It is necessary to have starters of foundation or comb. 2. Because if no starters are used a large proportion of the combs will be attached to the separators.—JAMES A. GREEN.

1. Most certainly it is. 2. "Why," to induce the bees to start the combs in the center of the sections. There is nothing like a "starter" to set bees promptly to work.—G. W. DEMAREE.

1. Yes. 2. Without it, bees will often hesitate in entering the super at a time when "time is money." With me, foundation would be cheap at double the price.—WILL M. BARNUM.

1. Yes. 2. To have the septum in the center of the section; to have the combs built straight in the sections; and to save honey used by the bees in wax-making.—MRS. J. N. HEATER.

1. Yes. 2. In order that they may build the combs straight, and not fasten them to the separators. Also, that they may go to work in the sections promptly and not neglect them, and devote their time to swarming.—EMERSON T. ABBOTT.

1. Yes, I would always use starters, and deem it necessary. 2. You can have the bees build where you want them to with starters, and they sometimes take a notion to build two combs instead of one, and often have ugly sections when no starters are used, even with separators.—MRS. JENNIE ATCHLEY.

1. Yes, most assuredly; and for myself I get the best results only by the use of both sections and frames filled with foundation. 2. Separators do not start the bees into sections, but only compel them to build regularly. Starters, or full sheets of foundation, should be used both to entice the bees, and to force them to build true.—J. E. POND.

1. In order to compete with others it is necessary to avail ourselves of every possible favorable condition to produce the most and the best article; the ones that so do need fear competition the least. A full sheet of the lightest foundation in the sections is the more favorable condition to secure most of the best honey.—R. F. HOLTERMANN.



Foul Brood — Something More About Its Cause and Cure.

Written for the American Bee Journal

BY CHAS. F. MUTH.

I admire the zeal of Mr. McEvoy in his effort to root out the dread disease, foul brood. His experience, however, is different from my own, and I will state some of my experience.

A good many bee-keepers remember our National meeting at Ontario, when Mr. Jones recommended the starving process for the cure of foul brood, and I doubted his ability. I offered a wager of \$50, the money to go to the Langstroth fund, if Mr. Jones would cure, of foul brood, a colony I should send him. Prof. Cook was favoring Mr. Jones on the subject, and I proposed to send a colony to him for treatment on the Jones plan, which he refused, for fear that foul brood might be introduced thereby into Michigan.

Since I read Mr. McEvoy's articles I am convinced more than ever that neither he nor Mr. Jones were dealing with the same disease that I am acquainted with. I have transferred from box-hives and guns to frame hives, very many colonies—very likely several thousand—and I remember a case where we had thrown in a heap, or a box, the waste comb and drone-comb containing larvæ of all ages. When I visited the party about a week afterwards, I was surprised at the stench emanating from the putrid drone-larvæ. A dearth was prevailing, and thousands of bees were covering the putrid mass. No foul brood was transmitted. I remember other similar cases with no bad results.

For many years, during the months of March and April, I bought, from bee-keepers in Mississippi and Arkansas, 200 or more colonies of bees, and had them shipped to me by steamer, 25 or 30 colonies at a time, and the shipments about a week apart, so that I could give

them a prompt overhauling and cleaning upon their arrival. My friends were to send me colonies strong in brood—I cared nothing for their old bees, and advised them to exchange places with their weakest colonies, so as to let the old bees fly over to them. Several times they did not follow my advice, and shipments arrived with two-thirds of the bees and all the brood in capped and uncapped cells smothered to death. After the hives were cleaned out, the greatest part of the cleaning of the combs was left to the bees. The stench emanating from some of the hives became so strong that it could be smelled distinctly when walking about the apiary.

As the cleaning of the cells progressed, the stench ceased, and the combs became refilled with healthy brood in due time. However, the saying that there is no rule without an exception, proved true here. In a number of hives healthy brood became diseased, and when uncapping some of the suspicious-looking brood-combs, they would emit a blackish fluid with a strong stench. I kept exchanging the worst of these combs for clean ones, hoping that a cure might be effected thereby. In some cases I removed all combs containing capped brood, leaving them the combs with eggs and healthy-looking larvæ. But there was no end to my foul brood.

This was in the good old times before foundation had made its appearance, and when every good bee-keeper had a good supply of empty combs on hand. I then removed every comb containing brood, and replaced them with clean, empty combs, when my success was complete, and no more of this (mild type of) foul brood. I had disinfected nothing. The removal of all combs containing brood had been my sole remedy. The disease had been caused by the rotting of uncared-for brood, and is very likely the same disease that Messrs. Jones and McEvoy are acquainted with.

The genuine, or virulent, foul brood, the acquaintance of which I made afterwards, is certainly *not caused* by the rotting of uncared-for brood, as Mr. McEvoy believes, although his idea is supported by several good bee-keepers in Germany. They are wrong, to the best of my judgment.

The genuine foul brood spreads by spores only, and is very likely an imported disease. It is of an entirely different, insidious character, and more stubborn to fight than the above-described mild type.

My apiary had been free from foul

brood for all summer, fall, and the following spring. During spring, however, I bought some bees and placed one hive on a plank above which an infected hive had stood the previous spring. When treating it, I had, many times, by the means of a tooth-pick or match, pulled out diseased larvae and dropped them on the plank at my feet. When done, I would scrape up the larvae and disinfect the place with salicylic acid. So I had placed a hive of bees on the plank, the entrance facing the spot upon which larvae diseased with foul brood had been dropped about 12 months previously. About two weeks afterwards I discovered foul brood in that identical hive. It had just commenced, only a few of the uncapped larvae being affected. The colony was cured with two sprayings of salicylic acid. There was no other case of foul brood in my apiary that summer.

My disinfection of the plank had been, perhaps, imperfect at one time or another, and spores of the disease (*bacillus alvei*) were hid among the fissures of the wood, and carried along on the feet of the bees running over them, and dropped in brood-cells where they came in contact with larvae, and caused again a new outbreak of foul brood. I admit that a conclusion like the above is not infallible, but my observations in similar cases, which I can state hereafter, convince me that it is correct.

Cincinnati, Ohio.

Why Do Some Suffer from Bee-Stings and Others Not?

Written for the American Bee Journal

BY G. P. HACHENBERG, M. D.

The above is the subject of an article published in the AMERICAN BEE JOURNAL of June 1st. The writer propounded the question, but failed to answer it. He simply tells us why some people are more likely to be stung by bees than others—a subject that hardly needs discussion.

The tolerance created by a bee-sting involves a principle that is at this time the most intricate subject now under investigation by the *savants* of the medical profession. Koch and Pasteur have made themselves famous in the investigation of this principle, almost as much so as Jenner has by his discovery of cow-pox inoculation. But it is not only by the inoculation from the bee-sting, vaccine virus, hydrophobic extract, or, in-

deed, almost any poison, as in hypodermic injections of opium, chloral, arsenic, that a tolerance is established; but nature itself will often produce it spontaneously by the development of a disease, that hardly ever can be reproduced in the same subject again, as in typhoid fever, measles, small-pox, yellow fever, etc.

It is under this physiological principle that a tolerance from bee-stings is established. I know this to be so from my own personal experience. When I had first to do with bees, their stings put me in the greatest agony. The stings were not only exceedingly painful, but were followed with horrible tumefaction—about the face in particular.

But I noticed that these mishaps with me in the apiary, in course of time, became less, both in pain and swelling. Now, after receiving (since I became an apiarist) a couple hundred bee-inoculations, the stings nearly lost their poisonous effects; indeed, so much so, that I finally got to be as careless about their stings as I was timid and over-cautious at first.

Another question of interest in my experience is, that the bees molest me greatly less now than they did when I first worked with them. Do they know me as a dog knows his master, or do they know that I am iron-clad against their stings? I am inclined to believe both.

But let me take an ill-smelling, oleaginous "nigger," or a Dutchman saturated with beer, whisky and tobacco, into my apiary, and the bees are sure to get rid of the offensiveness without much delay; and often I have to march with him as a penalty for his introduction into their sweet, pure and sacred realm.

The olfactory of the bee is exceedingly sensitive; by it they find the honey-flower, know the members of their own family, the intrusion of a robber; and when you are once stung by a bee, every other fighting bee aches to give you another punch. And by some mysterious contrivance, it appears when you are once iron-clad from their stings, and you behave towards them as a gentleman, they soon find it out and molest you hardly ever.

I am firmly under the impression that the bee-sting inoculation will some day prove a cure or prophylactic of some formidable disease—it may be hydrophobia itself—where the protection of the system is rendered by substitution.

Austin, Texas.

Experiments in Apiculture — Something About Them.

Written for the "Bee-Keepers' Review"

BY W. Z. HUTCHINSON.

All of our bee-journals are published simply to tell of new things, of those not before known, or, at least, not generally known. From whence come these facts? From experience; from experimenting. Scattered all over the land are bee-keepers. In the spring each one starts in with a more or less definite plan of how he will manage his apiary that season, but many times during the season must he make a choice of several different methods. Some of them may be of minor importance, others may make all the difference between a fair crop and being obliged to feed the bees for winter.

Suppose the bees are in the cellar; how early shall they be taken out, shall they be protected when taken out, shall they be fed to stimulate them, shall swarming be allowed, shall foundation be used in the brood-nest in hiving swarms, shall there be an effort to make the number of unfinished sections, at the end of the season, as small as possible, or shall abundant room be given to the end of the harvest, and then feeding back be resorted to for completing the unfinished sections? These, and many more questions, would bee-keepers like answered.

The trouble with the average bee-keeper is, that he is likely to choose some one of these plans and carry it out with his *whole apiary*. No comparative work is done. If he gets a good crop with the plan adopted he reports it as a success. Perhaps some other plan might have been *more* successful.

A writer in a recent issue of the AMERICAN BEE JOURNAL, in criticising my advice not to hive swarms on drawn comb at the height of the honey harvest, when working for comb honey, mentioned two or three instances where he had done so, and, by the way, one was where he had put two swarms together, and secured good results. If he tried hiving swarms on starters only in the brood-nest, he does not mention it. If he did not try it, he does not know that it would not have been more profitable. Mr. Doolittle, a few months ago, mentioned in the *Review* an experience of his in stimulative feeding in the spring. A part of his apiary was fed and went booming ahead at such a rate that it was a great temptation not to feed all

of the colonies. As a result of resisting the temptation, he learned that in that instance, at least, not much was gained by the feeding. "It is in such ways as this that experiments ought to be conducted.

It is not every bee-keeper that is "cut out" for an experimenter. It needs a person of a judicial cast of mind, one that is perfectly willing, so to speak, that an experiment shall prove the truth. Too many of us are inclined to make a decision *first*, and then go to work and try to prove what we already believe. This will not answer. An experimenter ought to be wholly disinterested in the results, that is, be willing that an experiment proves either side of the question.

It costs money, time and bees to experiment. The average bee-keeper cannot afford to spare much of these without a reasonable supposition that there will be a money return. If he desires to experiment he is confronted with the query, Will it pay? Unless there are fair prospects of a money return, it must be abandoned.

The foregoing are not the only reasons why it would be advisable to have competent bee-keepers employed by the government to take charge of experimental apiaries. There is another reason that perhaps but few have thought of viz.: that such a person would be clothed with authority. What he said or did would be looked upon with respect by the outside world.

For instance, when queen-bees were thrown out of the mails, it was mainly through the efforts of Prof. Cook that they were re-admitted. Last year a duty was placed upon queen-bees imported into this country. Again it was through the instrumentality of Prof. Cook that this duty was removed. Prof. Cook told me himself that as an *individual* he could never have accomplished these results, but, as Professor of Entomology in the Agricultural College of Michigan, he was heard, and his arguments given consideration. Cases like these are liable to come up at any time, and a good man at the head of a State experimental apiary would be a power for good.

It seems as though no arguments are needed to show that an experimental apiary in each State would be a great benefit. We all know that there are many questions connected with bee-keeping that are unanswered, and that the correct answer to them would make of bee-keeping a more safe and profitable pursuit. Frank Benton writes me

that there are about twenty different lines of experimental work that he would like to take up, in some of which he has already planned the experiments that he would conduct, and he considers some of them of more importance than his climatic mailing-cage and food for shipping queens, but he has no opportunity to make these experiments at present.

Not only this, but there are new problems continually coming up that will need to be solved. One man, working in a careful, methodical way, having bees, appliances and means at his command, can do more to settle the knotty problems of apiculture, than can all of the bee-keepers of the State working in a hap-hazard manner. If each State and Territory had an experimental apiary manned by a competent person, and the reports of the work published in the journals, so that bee-keepers could read and criticise and suggest as the work is going on, bee-keeping would receive another boom, and such a one as would help those already in the business.

The *Review* is going to work to try and have bee-keeping recognized at the State Experimental Stations. Each State and Territory receives from the General Government \$15,000 annually to carry on experiments in agriculture, horticulture and the like. You do not need to be told that bee-keeping has been almost entirely neglected at these stations.

Dr. Miller gives as reasons for this neglect, that the directors of the stations, or the State Boards of Agriculture, are uninformed in regard to the importance and needs of apiculture, and that bee-keepers have been too modest in asking for their rights. I think he is correct. I feel confident that the bee-keepers of any State can have an experimental apiary if they will only go to work to secure it. But, as I said last month, passing resolutions and appointing committees at conventions will not do it; there must be some work done by some one. The resolutions and committees are all right as preliminary moves. The State Board of Agriculture will listen to a committee from the State Association of bee-keepers when it would pay very little attention to individual requests. Put the right men on the committee—men of experience and good sense.

Another thing: Raise some money, even if you have to do it by subscription, to pay the expense of the committee in meeting with the State Board of Agriculture. Of course, the expense may not be very heavy, but the individ-

ual members of the committee ought not to be asked to bear it. Perhaps the funds of the Bee-Keepers' Union might be used to advantage in helping to bear the expenses of such committees. If the Union would bear half of such expenses, I believe it would be money well spent. What does its Manager and others think?

After a State Board has decided to use money for apicultural experimental work, let bee-keepers look to it, and look sharp, too, that the work is placed in the right hands. This is the most important point of all. Let the bee-keepers select the man. Perhaps it would be a good plan to select him by a vote at a meeting of the State Association. Let him be a practical bee-keeper, one who has produced some honey, and managed a good-sized apiary. There is nothing like actual work in a good-sized apiary to enable a man to comprehend what bee-keepers really need to know. Don't get some theoretical writer for the press. Get a man to whom bee-keepers will look with confidence. I could name half a dozen men in as many different States, who, I know, would fill the bill.

Flint, Mich.

[For editorial remarks upon this subject, see page 167 of this number of the BEE JOURNAL.—ED.]

Some Exceptions to General Rules About Bees.

Written for the American Bee Journal

BY H. F. COLEMAN.

Bees sometimes, it seems, delight in exceptions to general rules, and if we would be successful in their management, we should be acquainted with these exceptions.

I have observed that, as a general rule, bees will not swarm before capping one or more queen-cells, but they sometimes swarm before beginning a queen-cell.

As a general rule they will—if the weather is favorable—swarm in 24 hours after capping a queen-cell, but sometimes, even in favorable weather, they will not swarm for three or four days after capping the first queen-cell.

As a general rule, when the bees destroy young queens in the cell, they do so by cutting into the sides of the cell, but sometimes they destroy such queens by cutting, or working, off the points of the cell.

As a general rule, if an Italian queen

produces all three-banded workers, she is found to be purely mated, but it is sometimes found that such a queen will not produce a single queen that shows pure stock.

The last exception is one of most vital importance to beginners in bee-culture, and I sometimes think that the rule as to a tested queen should be changed so as to avoid mistakes on this line. As a matter of fact, a pure queen, purely mated, will invariably produce pure queens, and when the writer finds a queen that will not produce pure queens, he puts it down that she is either impure herself, or that she was mated by an impure drone. This being true, it follows that the first quality of a tested queen should be the production of pure queens, instead of three-banded workers. No possible harm could result from this rule, just as many queens would be sold, and in that case every tested queen, as far as stock is concerned, would do for a breeder, and would sell for a good price.

Much harm, in my opinion, has resulted to beginners in not knowing that some queens would produce all three-banded workers, and would not produce a queen that was fit to rear queens from. I had, in the beginning, a sad experience along this line, and know of others who had the same, and I now know whereof I speak.

Sneedville, Tenn.

Further Account of a Chinaman's Bee-Keeping.

Written for the American Bee Journal
BY WUNG LUNG.

Lassa tlime I talkee about my sugar-fly, my planter, Miister Mlufley, and lot of other things. Thissa tlime me tell you 'bout my cousin, and how I cure him of lumatism; I also tell how to sell sugar-fly sugar, and make heap money.

You sabbe lassa tlime me heap A B C scholar; now me full-fledged sugar-fly keeper. Mr. Mulphley call me "glad-late in skule of aplikultural scilence." I no sabbe him; but guess he mean I know heap lot about sugar-fly.

Now, you sabbe I catch sugar-fly two, tee year ago. Flirst year I no make money off him; nesa year me now tell you what me do. July thissa year I have tlen hives; me extlactor one ton sugar. Sugar-man in Sian Flancislio say he give me six clentee one pound for him. Me talkee him too muchee

cheapee. Me wantee eight clentee. No sellee in Sian Flancislio; me go home and makee sugar-fly sugar into yepyamsa —him heep nicee; Chinaman heep likee.

Me go Chinatown and see my cousin—him big mierchant—and sell him yepyamsa 15 clentee one pound. One pound sugar-fly sugar make tee pounds yepyamsa, and cost me flour clentee. Me do belly wel' not sell sugar for six clentee. Me make 41 clentee one pound by making him into yepyamsa. Nlext year me try and make flour tons of yepyamsa. Pretty soon me belly lich and go black to China to see my wiffo.

Me tlink Mr. Lambler tlink me own an intlerest in that bleet sugar flactlory near where him lives. He might likee to know how to make yepyamsa; he will have to wait a long tlime, for me don't plopose to give the secrect away. If me find him fooling 'bout here he will find himself in a worse whirlwind than him got Plofessor Clook and Mr. Hutchinson into.

At the end of my slecond year, me had 27 swarms in heep nice bloxes. Mr. Mlurfrey call him in "pig-tail blox," wha' for, me no sabbe. Nexa year me try to have 100 hives; then me make heep yepyamsa. Mr. Mlurfrey say belly good for me Mr. Cleveland get into office, for him big Mogul Cleveland won't have to protect my new Amelican inflant industry.

Me lookee bee-blook to see what to do with extlactor, when not used for honey-fly sugar, but could not find anything in him. Me tell you what do. Me loan him to Jim Lee to make him wash-ing nice and clean and dry. Extlactor heep fine to dry clothes in. Take washee out of tub water and blow him into extlactor, turn handle, and pletty soon washee belly dry—water all fly from washee. Me tlink before long all Chinese wash-house have extlactor to dry washee. Me wish extlactor had platent on him, for me would become him agent, and sell heep lot to Chinese wash-house.

Me Slunday-school teacher talkee me one day that sugar-fly-bite heep good for lumatism. Slam Lee long tlime hap die in Sian Flancisco with him 'tlism; so me catch one dozen sugar-flies, put him in blottle, and take him to Slam Lee. Lee belly stliff, he no move 'blout for tlen year—him allee samee him hap die. When me go Slam Lee's house him sleep belly sound. Me tell young Sling (him Slam Lee's cousin) me make Lee heep well belly much quick—him walk belly fast, allee samee him no sick.

Young Sling say him heep glad; him say me make him cousin well him give me \$100.

So me go up to sick Chinaman's bled, open him shirt and shake sugar-fly out of blotte on Lee's skin and put back shirt and blanket belly quick.

Slam Lee jump up belly mighty quick. Him get big move on him, as policeman say. Him yell and jump allee samee him clazy. Chinaman come in fiom stleet and belly much astonished when they see Lee with big move on him. Lee lun about, upset furnitur, and tear him hair from him pig-tail. Him fearfully clazy; me muchee scared, for me thlinkee him might hap die, and policeman takee me to calaboosee. Pletty soon Lee lun out of housee into stleet with nothing on him but shirtee. Him allee time yell and tear him shirt and queue; big crowd gather, and hood-lum boy say, "See the clazy heathen with nothing on but a shirt and pig-tail, and him tying to get them off as fast as he clan."

Lee was lunning in blizness street when ploliceman stop him and wanted to takee Lee to clazy housee. Just thien a sugar-fly got out of Lee's shirt and bitt policeman under him nose. Ploliceman swore and jumped worsee than him clazy with too muchee gin. One Melican man allested plolice officer for using heep bad cuss-word. Lee now lun home and get sting taken out of him.

Him soon all lite, and work in glarden. Young Sling glive me \$100. Me belly much heep slatsfied with sugar-fly; make belly much money fiom him.

Nexa time me tell you more what me do.

Slan Flancisco, Clalifornia.

Notes from Utah—Winter Losses, Swarming, Etc.

Written for the American Bee Journal

BY E. S. LOVESY.

The Bee-Keepers' Association of Salt Lake county is holding meetings through the county this year, and among other questions considered is the winter question. We are trying, if possible, to arrive at some satisfactory conclusion as to the best method of wintering the bees. The winter question here causes more loss than any other single question. I have interviewed over 100 bee-keepers on this subject, and in going through the county I have collected

some very interesting points. I also have information from other parts, which I will write about later. We hope to be able to adopt some plan to protect ourselves from those heavy winter losses.

INTEMPERANCE THE CURSE OF THE AGE.

I very much admire the remarks on the liquor question on page 745. I look upon intemperance as the curse of the age. It is the cause of nine-tenths of the crime, misery, poverty, etc., in our fair land. If this rum fiend could be abolished, it would be a happy land. It fills the jails, thereby taxing the industry of the people. You can scarcely conceive of the wreck and ruin caused by the drink demon. He robs his victim of his reason, his health, wealth and happiness; takes his home, and those that are dear to him, and even his life must pay profit to this rapacious monster—intemperance.

While the people here are sober and industrious, as a rule, our bee-keepers are especially so. I do not know of one intemperate bee-keeper. The bee-hive is Utah's emblem, and many of her people pride themselves in being called "a working bee in the hive of Utah."

There seems to be a fascination about the little, busy bee that tends to create a soft, kind, refining influence, which helps the possessor to become satisfied with himself and all that he may come in contact with. Thus they tend to calm, and sooth, and develop a sympathetic disposition. They cause many a brilliant star to shine, which might otherwise remain in obscurity. I might mention dear old Father Langstroth, and Mr. Doolittle, Mrs. Atchley, and many others. It is seldom that this class of people, after becoming acquainted with their little friends, the bees, like to part company with them entirely. When the time comes that such people may have a strong voice in our government, the intemperance problem may possibly be solved.

THE SWARMING PROBLEM.

I have read and heard considerable of the swarming or non-swarming problem of late. In my own apiary the bees do not swarm. This is the fourth year since I have had a swarm come out, on the natural plan. While I do not pretend to have solved any problem, it seems simple and easy to avoid natural swarming, if you have the bees shaded a little, and work for extracted honey, or part comb honey. I do not think that natural swarming can be prevented en-

tirely, if you work for comb honey exclusively.

THE ANT TROUBLE AMONG BEES.

I have received several communications from sympathetic bee-keepers on the ant question, for which I wish to return thanks. It seems that I created a small breeze on the ant question lately. I find that they are troublesome in many parts of the country, as well as in Utah. I have out-generalized those pests at last. I will tell of it sometime. I am very sorry if I have alarmed Dr. Miller so that he will not come to Utah. The Doctor has many admirers here, and I hope he will change his mind and conclude to pay us a visit. I can assure him that we have one of the best and healthiest places in the United States; and who is there that has not heard of Utah's famed honey and potatoes? If the Doctor was here now to enjoy our pure mountain air, and the nights we have, he would not want to go back to Illinois very soon. Hot nights, such as occur in the East, never were known here. Then, we have no terrific cyclones or floods, but we have our renowned Salt Lake—a ride out to it, and a bath in its waters, will cause even the invalids to rouse up and eat a square meal. The truth is, all Salt Lake needs is to be seen and known to be appreciated.

Salt Lake City, Utah, July 24, 1893.

A Review of a Chapter by the New Prophet Samuel.

Written for the American Bee Journal

BY THOS. JOHNSON.

On page 690 appears a chapter written by the "Prophet Samuel," and I believe his last name is Wilson. In the first verse he says that I first reported that I had taken 40 pounds per colony (correct prophet). Then he proceeds to tell just how much honey I got—in his mind. Now, in order to stop the prophet from going back and repeating it the third time, as this makes the second time for him, I will say that on June 1st I had 60 colonies of bees, 40 colonies I run for comb and extracted honey, and 20 I cut up into nuclei for queen-rearing. On Aug. 1, 1892, I cleaned up and took all the honey that was marketable from the bees, and my scales indicated 2,800 pounds of comb honey and 1,100 pounds of extracted.

About Sept. 20, 1892, I cleaned up

again, and took from them 300 pounds of comb honey, and 600 pounds of extracted, all in marketable shape. All sections that were not three-fourths or more capped were kept for family use, or returned to the bees last spring, and are not estimated in the above figures. Since Aug. 1, 1892, to the present date, I have sold 3,100 pounds of comb and 1,600 pounds of extracted honey, and have a little honey left.

The reason I had taken the 40 pounds per colony, on an average, up to July 18, 1892, was that I had to do it to get empty supers to make room for more honey.

In the second paragraph of his article the prophet says that Frank Coverdale did that well. Yes, sir; Frank Coverdale did well, as he had a splendid fall flow in his neighborhood. In the same paragraph he says that Oliver Foster said Mr. Staininger's 170 colonies gathered 12,700 pounds of honey, and quotes a great deal, and tells about his foot-power saw and a pyramid of honey as high as the tower of Babel—all in glass-houses surrounded by mountains of snow. It was so long and flourishing that I cannot say whether he mentioned in it that Mr. Staininger was a jeweler by profession, or not. He "winds up" by looking out of the window, and there were 230 colonies of bees, and it must not be forgotten it was one of the off years, for the balance of his apiary, as bloom only came for the 170 colonies, and the 230 colonies saw nary a blossom—all they had to do was to sit around and sing the old familiar song, "Way Down in Tennessee," where the Prophet Samuel lives.

The last verse of Samuel's chapter is pretty hard to swallow, and keep it down, but here goes. "Johnson warns me," etc. Turn back and read again. It was the other fellow, and I just made mention of it, and says my bees gathered the honey from "prairie grass," or something to that effect, and says Mrs. Atchley will want to go up to Iowa. Should Mrs. Atchley take the prophet's advice, and come to visit me, I will bet an Iowa bumble-bee against a Texas grasshopper that Mrs. A. will enjoy the visit, as well as myself, and she will find as free a heart in me as in any man that ever trod the Kentucky blue-grass, and we may talk over the times when Mrs. A. was a small girl and I a chunk of a boy dressed in blue or gray.

Well, after the prophet worked and waxed hard to convert the Hawkeyes (except Thomas, for he is a contrary

fellow, and always siding in with Peter), he took the flier, skipped over to California to convert the heathen Chinese who keep "honey-flies," and tells them that they will have a good honey-flow from white clover—even that plant does not grow west of the Rockies. In western Nevada, around Reno, the bees will fly away to the Eastern States—east of the 98th meridian—capture all the nectar from white clover before the Yankee bees get up, carry it over to Nevada and put it into their hives, so that Mr. Doolittle and others won't even get a smell! and while they fly over Iowa and Minnesota they will be so thick that their wings will fan out all the nectar so that friend Secor, of Forest City, will be "left" just as badly as his friends in the New England States! Think of it, and repent before it is too late! All this I find written in the new "Book of Samuel," and surely will happen this very year, because the prophet says so!

On his return trip he stopped off at Coontown, told Thomas to come hither and put his finger into the clover blossom, and be not deceived; so Thomas stuck his finger where the prophet directed, and the blossom was as dry as a bone. Now go and teach likewise. So Thomas was converted to the prophet's faith.

Now it came to pass, after some days, that Thomas began to teach as the prophet directed, and went up to Welton and Tipton, saw N. Staininger, and began to do as directed. Mr. Staininger told him that in the fall of 1892 they had one of the best honey-flows he ever saw, and the prophet said from white clover. All this is true, because it is recorded in the "Book of Samuel," and written by the Prophet Wilson.

Dr. Miller needn't be riding around Marengo in his one-horse chaise, laughing up his sleeve, because all the quinine you can get to issue won't stop the "honey-flies" from Nevada sweeping the whole platter, for Marengo is marked in the prophet's line, and surely the Doctor will catch it. He had better flee to "Egypt," and take his bees with him, for there will be a good honey-flow down there, because the prophet says so.

Coon Rapids, Iowa, June 6, 1893.

[We think that with the above we had better drop the discussion of honey-prophecies, unless Mr. Wilson is willing to explain just how he can foretell a honey-flow, or the probable failure of the honey crop, as he claims to be able

to do. So far there has been very little of value in what he has had to say, and unless something definite is forthcoming, we shall decline to publish anything further on the subject.—ED.]



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Rejoicing Over the Harvest.

Bees are doing finely here this season. Although we cannot get the amount of honey that the western States do, I think that the honey of Vermont is excelled by none. Bee-keepers are rejoicing over the bountiful harvest. W. G. WORDEN.

Guildford Centre, Vt., July 30, 1893.

No Honey Secured Yet.

We have had a long dry spell, and the bees are living on what they get, and that is all. We have not had a pound of honey this summer. The bees did not swarm until late, then I got 5 swarms from 42 old colonies. It rained last night, and I trust we will get a fall crop of flowers, and that will give us a fall crop of honey. Golden-rod is just beginning to show bloom, and it may give some honey this year. I have watched for two years to see the bees work on the golden-rod, and I never saw a bee work on it. Why it was I could not tell. Who can? Udall, Kans., July 27, 1893. S. STOUT.

Wolfberry and Alsike Clover.

I send a twig from a shrub that grows in abundance here, and it has almost as many names as there are people here. My wife calls it "wild snow-drop," as it resembles the snow-drop of our flower gardens. It grows about $2\frac{1}{2}$ feet high, and has clusters of small white berries. It is a great honey-producing shrub or plant. When it blooms it is literally covered with honey-bees. It does not produce much, if any, pollen. Please give the name of the shrub. I cannot tell the quality of the honey from this plant, and shall not be able to test it this year, as there are great quantities of wild morning-glories here, and the bees work on that every day.

I also have a field of Alsike clover that

has been in bloom for the past three weeks, and is as fresh to-day as it was the first week, and I go into it every day to see the bees work on it. It is like being in the midst of a swarm that has just issued from a hive, but if I find no bad flavors in this mixed honey, I shall conclude that the honey from this nameless plant is good.

I work on the one-pound section plan, and have never had bees store as much section honey since I have lived in this county as they do this year. If we can have two months more as good as the last month has been for honey, I shall expect much from my bees.

S. B. SMITH.
Leeville, Minn., July 15, 1893.

[The plant is called *symporicarpus occidentalis* by botanists, and is commonly known as "wolfberry." It is very closely related to the snowberry of cultivation, which is also found wild in Minnesota.—ED.]

Shoe-String Binder—Poor Crop.

Certainly no bee-keeper can afford to do without so much instructive and helpful matter as the BEE JOURNAL contains, and at so insignificant a price.

I wonder how many of the readers have learned how nicely, quickly and cheaply they can bind their copies of the BEE JOURNAL, by Dr. Miller's simple, home-made binder, which employs common shoe-strings? I have Vol. XXXI bound by this method, and what a pleasure it is to turn from page to page, just as in any other good bee-book!

As to the honey crop, it's a complete failure here. From 30 colonies I have obtained less than 20 pounds of surplus honey.

W. A. CAMPBELL.
Doogan, Ga., July 28, 1893.

The Season, Wintering, and Alsike.

I have 96 colonies of bees, an increase of 36 colonies this season. Bees are doing splendidly here. I have 21 Langstroth hives, and 21 of Hill's double-walled winter hives, and for out-door wintering in this locality, they are ahead of any other hive I ever used. The surplus arrangements I don't like. If they can be made so the supers will work on the same plan as the dovetailed hive, they would be the hive for out-door wintering.

To any one in Southern Indiana who is thinking of chaff-packing, cellar-wintering, and all such things, I will say, have plenty of bees and honey in the hives, and keep them in a dry place, and there isn't any cellar that can give as good a showing. Try it, and be convinced. My loss never has exceeded over 10 per cent., and I winter my bees out-of-doors, altogether now.

The Golden Italians seem to be "all the go" now. For beauty, 'tis well, but for honey give me a cross between the leather-colored and the native black bees. I have tried them side by side for years, and know whereof I speak. I have under my control 225 colonies of bees, and a great many of

them are Italians, but the hybrids and Carniolans gather a great deal more honey than the Italians.

Bee-keepers of America owe Mr. G. M. Doolittle more than they can soon pay, for his book on queen-rearing. Who can fill his place when he is no more? The snows of age fall lightly, but none fall heavier, for they never melt. But may the All-Wise Father spare us such men as Doolittle, Miller, and a host of others for many years, is my wish.

Does Alsike clover make good pasture for hogs? I have my hill land in red clover, and if I can change to Alsike I will be pleased to do so, providing it is as good for hogs.

E. W. MOORE.

Seigerts, Ind., July 21, 1893.

Another Cause of Foul Brood.

I said some time ago that I would give the origin of foul brood. It is caused by a fly depositing eggs in the brood-cells when the larvae are young. Look out for a very small fly.

C. P. HEWETT.

Kingston, Wis., July 28, 1893.

Season Better than the Average.

Bees wintered quite well in this section of country. There was but very little loss compared to a year ago. Some bee-keepers that lost but very few colonies a year ago, last winter lost quite a good many colonies. It is something that I don't understand exactly. I have had quite a considerable experience in the ups and downs of bee-keeping. My parents were one of the first settlers in the town of Sardinia, Erie county, N. Y. My mother had bees before she was married. Father brought them from Canandaigua in the winter on a sled, 75 miles. I have taken care of them ever since I was old enough to manage bees. The honey season is quite a little better than the average, this season.

EDWIN RICE.

Chaffee, N. Y., July 28, 1893.

Who are the Fortunate Ones?

What bee-keepers are interested in now is to know who are the fortunate ones to secure a crop of honey, and the favored localities this year. In this part of Illinois (Jersey and Madison counties), so far as I have been able to learn, the honey crop is a failure. The drought last fall, and the heavy sleet the past winter, killed out the white clover so badly that there was but little of it, and the bees failed to gather any surplus; and as they came out of the winter and spring in poor condition, the result is they now have but little honey, and unless we get a fall crop, bees in this locality will be in a very poor condition to winter, unless they are fed. Unless the hot, dry weather lets up soon, and we have rain, the prospect for a fall crop is quite slim, especially on the prairies. Along the river bottoms they usually get some fall honey.

H. D. EDWARDS.

Delhi, Ills., July 24, 1893.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, Aug. 5, 1893:

CHICAGO, ILL.—We quote fancy new honey at 18c.; No. 2, at 16c.; amber, 15c. Beeswax, 22@25c. We have had some shipments of fancy new stock which sold at once. J. A. L.

CHICAGO, ILL.—There is not much movement in comb honey. Prices range at from 12@16 and 17c., all good grades bringing 15@17c. A few cases of the new crop have arrived and brought the top prices. Beeswax is very steady at about 25c. Extracted honey is moving very slowly at from 6@8c.

R. A. B. & Co.

CHICAGO, ILL.—Honey this year is being placed on the market earlier than last season, but the demand is restricted and will be light until small fruits are out of the market, and with the prospect of a large crop, buyers will be particular as to quality, and the best will find ready sale upon arrival. No. 1 comb, 16c. Extracted, as to quality, 5@7c.

Beeswax—22@24c.

S. T. F. & Co.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6c.

Beeswax—20@23c.

C. M. C. C.

CINCINNATI, O.—Trade is dull in all its branches, with a fair demand for extracted honey at 5@8c. Prices for comb honey are nominal, with no choice honey on the market.

Beeswax—Demand fair, at 20@23c for good to choice yellow. Supply good. C. F. M. & S.

NEW YORK, N. Y.—No comb honey on the market. New crop extracted is now arriving freely from California and the South, and the market is well stocked. Trade is quiet, demand light, and prices have a downward tendency. We quote—Southern, common to fair, 60@65c. per gal.; choice, 70@75c. per gallon. California, 6@6½c. per lb.

Beeswax—25@27c.

H. B. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c.

S. L. & S.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. No beeswax on the market. H. & B.

BOSTON, MASS.—Honey is selling slow and prices are lower. Best 1-lb. comb, 16@17c.—Extracted, 8@10c.

Beeswax—None on hand.

B. & R.

ALBANY, N. Y.—Although honey market is not fairly opened yet, we are receiving a few lots that sell well, and indications are that honey marketed early this year will bring the best prices, especially comb honey. White comb, 15@17c.; medium, 14@15c.; dark, 12@13c. Extracted moves slowly, although white is not plenty and sells at 7½@8c.; amber, 7@7½c.; dark, 6@7c.

Beeswax—Quiet at 26@28c.

H. R. W.

MINNEAPOLIS, MINN.—There is quite an active demand this week for honey, especially white comb honey in 1-lb. sections. Dark is very slow sale. Stock on hand in this market is very light. Receipts have not been enough to supply trade during the past 10 days. Fancy white comb honey, 18@20c.; No. 1 white, 17c.; fancy amber, 16c.; No. 1 amber, 14c.; fancy dark, 12c.; No. 1 dark, 10c. Extracted California 60-lb. kegs, 9c. Beeswax, unsalable.

J. A. S. & Co.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT & Co., 161 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.

HILDRETH BROS. & SEGELEN, 28 & 30 West Broadway.

CHAS. ISRAEL & BROS., 110 Hudson St.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.

CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Amerikanische Bienenzucht is the name of a bee-book printed in the German language, which we now have for sale. It is a hand-book on bee-keeping, giving the methods in use by the best American and German apiculturists. Illustrated; 138 pages; price, postpaid, \$1.00. It is just the book for our German bee-keepers. We club it with the BEE JOURNAL for one year, for \$1.75.

Have You Read that wonderful book Premium offer on page 189?

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at 10 cents per line, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—High Grade Safety Bi-cycle, for Honey or Wax.
17 Atf J. A. GREEN, Ottawa, Ill.

WANTED—A good girl to do general house work in a family of four persons, two being children. A Methodist (or protestant) preferred. Reference—George W. York & Co.
Address, MORTON J. DATE,
3 Atf 189 Washington St., Chicago, Ill.

CONVENTION DIRECTORY.*Time and place of meeting.*

1893.
Aug 15.—Northern Illinois, at Rockford, Ill.
B. Kennedy, Sec., New Milford, Ill.
Oct. 11, 12, 13.—North American (International), at Chicago, Ills.
Frank Benton, Sec., Washington, D. C.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Dr. C. C. Miller....Marengo, Ills.
VICE-PRES.—J. E. Crane.....Middlebury, Vt.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.

Advertisements.**ONE DOLLAR**

Will purchase a Ten Dollar Queen by Return Mail. **HENRY ALLEY,**
WENHAM, Essex Co., MASS.

PATENT WIRED COMB FOUNDATION
Has No Sag in Brood-Frames

Thin Flat-Bottom Foundation
Has No Fishbone in the Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made

J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Montgomery Co., N. Y.

Mention the American Bee Journal.

By Return Mail, from that Specialist,

JAMES F. WOOD, North Prescott,
Mass.,

QUEENS **YELLOW TO THE TIP.**
Mated with hand-picked Drones
that have Solid Yellow abdomens

These Drones are from a different Strain than the Queens, hence a Direct Cross is secured. I can warrant them to produce a large per cent. of **Golden Workers.** I have tested several of them, and have quite a number that show Every Bee Evenly Marked with 4 Segments Solid Yellow, and a Yellow Band on the 5th, and a great many show from 80 to 95 per cent. such marked Bees, and none less than 40 per cent. These are what are commonly called "5-Banded Bees."

Price the same as in former years, 75 cents each. 6Etf

Mention the American Bee Journal.

WAR IN SIAM

Is of no particular interest to us, but if you do not want **WAR IN YOUR APIARY** get some of Trego's Gentle

Solid Yellow Queens,

Warranted to get Bees with at least 3 Broad, Yellow Bands, and Very Yellow Drones—and many of them get Bees all 4 and 5 Banded. See here:

"Many thanks for the two Queens sent May 18th. Their Bees are Yellow to the Tip.—ISAAC HAYS. N. Yakima, Wash., June 29. '93."

One Warranted Queen, \$1.00 ; 6 for \$5.
Money Order Office—Cable, Ill.

S.F. TREGO, SWEDONA, ILL

Mention the American Bee Journal.


Sample of the only 50c a year 16-page ag'l & home weekly ; circul-lars, etc., of best house-hold steam cooker ; & terms to agents, all for 2c stamp. Agents clear \$50 a week.

FARMER'S CALL, Quincy, Ill.
Sample paper free. New subs., 1 year, 25c.; 3 yrs. 50c.

DR. WINCHELL'S TEETHING SYRUP

Is the best medicine for all diseases incident to children. It regulates the bowels; assists dentition; cures diarrhoea and dysentery in the worst forms; cures canker sore throat; is a certain preventive of diphtheria; quiets and soothes all pain, invigorates the stomach and bowels; corrects all acidity, will cure griping in the bowels and wind colic. Do not fatigue yourself and child with sleepless nights, when it is within your reach to cure your child and save your own strength.

Sold by all druggists. Prepared only by the **EMMERT PROPRIETARY CO., CHICAGO.**

2E20t Mention the American Bee Journal

EVAPORATING FRUIT

STAHL'S EXCELSIOR EVAPORATOR.
Best, Cheapest & Most Reliable on the market. Catalogue free. Address Wm. Stahl Evaporator Co., Quincy, Ill.

4E5t

WHEN ANSWERING MENTION THIS JOURNAL.

MY WIFE SAYS SHE CANNOT SEE HOW YOU DO IT FOR THE MONEY.

\$12 Buys a \$65.00 Improved Oxford Singer Sewing Machine; perfect working, reliable, finely finished, adapted to light and heavy work, with a complete set of the latest improved attachments. FREE TRIAL and FREE CATALOGUE. Order direct from our factory, and save dealers and agents profit. OXFORD MFG. CO., DEPT. Chicago, Ill.

Mention the American Bee Journal.